## 1. What are the most challenging aspects of the coursework task?

The challenging aspects of the coursework task were making the logic behind each of the functions to make it work. while working with each of the 12 functions of the noughtsandcrosses.py file. I was studying and searching about the logic that was needed to complete it. The hardest obstacle was to write logic of the play\_game and check\_for\_win functions. Later, reading and writing the leaderboard file was kinda hard for me but I could figure it out while going through the lecture, tutorial and the workshop slides.

## 2. How did you go about completing the task?

Firstly, I checked both the given play\_game.py and noughtsandcrosses.py file. The play\_game file was already completed.. There were altogether 12 functions in noughtsandcrosses.py file. I wrote the information needed to write in the welcome function calling the draw\_board function. After that, I created a menu function that prompts users to input the 4 choices to choose. Each option calls the function accordingly. Option 1, would call play\_game that will call the both initialise\_board and get\_player\_move functions. Both player and computer will choose the options one after another through get\_player\_move. Value 1 and -1 would return if the player or computers won and 0 if the match got a draw. Option 2 would save the player name and 3 would call the leaderboard.txt file to display output. and option 4 ('q') would end the program.

## 3. What have you learned over the course of completing this coursework task?

After completing this coursework task, I learned how to use the list format to make the noughts and crosses game. Creating and using the functions properly to make the program more readable and reliable. I learnt how to use the conditional statements to check and validate the input from the user. Handling, reading and writing on the file and listing the written file in the json format is also one of the learning parts of this course.